APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/640,016	08/17/2000	Yasuhiko Nagai	500.38895X00	4789

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EXAMINER
ARANI, TAGHI T

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/640,016	NAGAI, YASUHIKO
	Examiner	**Art Unit**	
	Taghi T. Arani	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 July 2005*.

2a)☒ This action is **FINAL.**　　　2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 23-29* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 23-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1and 23-29 have been examined and are pending.

Claims 2-22 have been canceled.

Claims 23-29 are newly added.

Response to Amendment

2.   Applicant's amendment filed 7/11/2005 necessitated the new ground(s) of rejection

presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP

706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

3.   Claims 1 and 23-29 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

The examiner request applicant to further explain the nature of the claimed invention

with respect to the acronyms used (PP, ST, TOE in relation to each other). However, if applicant

believes that an interview with the examiner would be more helpful and expedite prosecution of

this application, the examiner invites applicant to call for a personal or telephone interview at the

number listed below.

Claim 1 recites "the registered PPs or STs local PPs" in line 21. There is insufficient

antecedent basis for "the registered ... STs local PP" in the claim.

Claim 28 recites the limitation "the partial database" and "the case database" in lines 4

and 5 respectively. There is insufficient antecedent basis for these limitations in the claim.

Dependent claims 23-27 and 29 inherit the 35 U.S.C. 112 issues of the independent claim

1 and may not be further considered on their individual merits.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 1, 23, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over

prior art of record, Richard Baskerville, ACM Computing Surveys, December 1993 and further

in view of US patent No. 5, 850,516 to Schneier.

As per claim 1, Baskerville discloses a security system design supporting method

implemented in a security system design supporting tool including a processor which conducts

processings on data stored in memory, for supporting designing of security requirements or

security specifications based on an international security evaluation criteria during

planning/designing of an information-related product or an information system, said method

comprising the steps of **(Baskerville, page 394, section 2.3, computer-Based Mechanistic**

Engineering methods):

providing, in the memory, a template case database for storing protection profiles (PPs)

that have been internationally registered or PPs or STs (security targets) **(Baskerville, page 395,**

CRAMM software, stage 3, wherein the existing system countermeasures (controls) are

entered in the CRAMM software, based on asset groups, risk levels, existing controls (i.e.

PPs that have been generated and that have not been registered) and an internal database

of 900 possible countermeasures (i.e., PPs that have been internationally registered)) , and

that have been generated and that have not been internationally registered, in a class-tree

structure based on an inheritance relation between types of products or systems as a target of

evaluation (TOE) of said PPs or STs .

specifying, to the processor, the PPs or STs related to the TOE by designating elements

included in the products or systems, type and evaluation assurance level of the TOE, and

retrieving a relevant class-tree structure from said database **(page 395, CRAMM, Stage 2,**

wherein the second stage commences with the grouping of assets into suitable "asset

groups" and analyzing the asset groups using a database of 17 generic threats and

calculating the level of risks for each asset group); and

generating, by the processor, a PP or ST draft of the TOE by integrally editing contents of

a definition of the specified PPs or STs.

wherein as to the generated PP/ST draft of the TOE, if the registered PPs or STs local PP

matches PPs or STs retrieved from the database, the retrieved PPs or STs are used **((page 395,**

CRAMM stage 3, wherein countermeasures (controls) are entered into CRAMM software

based on asset groups, risk levels, existing controls, it then compiles a list of recommended

additional countermeasures, i.e. internally editing the contents of a definition of the

specified PPs or STs, page 396, and mapping between the profile table entries and the

standards file),

Baskerville is silent in disclosing that the PPs or Sts are generated and registered in a

class-tree structure and if there are no match, high-order PPs or STs among the generated PPs or

STs are retrieved based on an inheritance relation to thereby partially add and correct the

PPs/STs.

However, Schneier teaches **(Fig. 5 and associated text)** a computer implemented method

and apparatus wherein security of system is represented in a class-tree structure **(Abstract, see**

col. 5, lines 65-67, col. 6, lines 25-43, col. 11, lines 47-67).

Schneier further teaches that once the user identifies the system to be analyzed **(col. 11,**

lines 24-46) having established the tree structure, a tree analysis software **(col. 12, lines 15)**

determines the value of a node and determines if the goal node value has been calculated. If not,

the process retrieves another child node for processing and once the value of the goal node

(higher order based on an inheritance relation) is calculated, the value is displayed on video

display of the computer system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to employ the teachings of Schneier's tree structure database in the

CRAMM 's risk analysis tools (disclosed in Baskerville) with motivation to provide quantitative

capabilities in comparing different countermeasures **(Schneier, col. 2, lines 45-63).**

As per claim 23, Baskerville as modified discloses the security system design supporting

method according to claim 1, wherein if the high-order PP among the generated PPs is not

successful to match, the generated PP draft is registered in a local PP/ST tree structured database

(Fig. 5 and associated text, elements 520-560, where CPU executes tree software displaying

leaf node requiring input and processing child nodes until goal node determined.)

The Examiner supplies the same rationale for the combination of Baskerville and

Schneier provided in claim 1.

As per claim 28, Baskerville as modified teaches the security system design supporting

method according to claim 1, further comprising the steps of: storing information newly added as

the result of PP or ST generation in the process of PP or ST generation in accordance with the

inheritance and correspondence in the template case database and the partial case database; and

improving and expanding the information stored in the case database (**Fig. 5 and associated**

text, elements 520-560, where CPU executes tree software displaying leaf node requiring

input and processing child nodes until goal node determined.)

The Examiner supplies the same rationale for the combination of Baskerville and

Schneier provided in claim 1.

As per claim 29, Baskerville teaches the security system design supporting method

according to claim 1, wherein the generated PP or ST can be evaluated in a PP or ST evaluation

check list in the form of questions based on an international security evaluation method

(Baskerville, page 395, CRAMM stage 2, page 396, table 8).

5.   Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over prior art of

record, Richard Baskerville and Schneier as applied to claim 1, and further in view of US Patent

No. 6,484,261 to Wiegel.

As per claim 24, Baskerville and Schneier do not disclose but Weigel discloses the

security system design supporting method according to claim 1, further comprising the steps of

(Abstract, col. 13, lines 14-22):

indicating the PPs or STs stored in the template case database as icons by which the

constituting elements, type and the evaluation assurance level can be identified (col. 14, lines 20-

35);

specifying the PPs or STs related to the TOE from the inheritance tree based on a

reference PP or ST cases of the inheritance between the PPs or STs expressed in a tree (col. 14,

lines 39-42); and

producing a structure diagram of the TOE using the icons of said specified PPs or STs as

constituting elements (col. 14, lines 43-52).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to employ the graphical network security policy management of Weigel in CRAMM's

risks analysis tools with a motivation to construct a security policy that is easily understood by

administrator (Weigel, col. 4, lines 24-30).

Action is Final

6.   **THIS ACTION IS FINAL.** Applicant is reminded of the extension of time policy as set

forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this

final action.

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Taghi T. Arani whose telephone number is (571) 272-3787. The

examiner can normally be reached on 8:00-5:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Taghi T. Arani, Ph.D.
Examiner
Art Unit 2131
9/27/2005